

APPARATUS AND PROCESS FOR THE PREPARATION  
OF LOW-IRON SINGLE CRYSTAL SILICON SUBSTANTIALLY  
FREE OF AGGLOMERATED INTRINSIC POINT DEFECTS

ABSTRACT OF THE DISCLOSURE

5           A method and apparatus for producing silicon single  
crystals with reduced iron contamination is disclosed.  
The apparatus contains at least one structural component  
constructed of a graphite substrate and a silicon carbide  
protective layer covering the surface of the substrate  
10       that is exposed to the atmosphere of the growth chamber.  
The graphite substrate has a concentration of iron no  
greater than about  $1.5 \times 10^{12}$  atoms/cm<sup>3</sup> and the silicon  
carbide protective layer has a concentration of iron no  
greater than about  $1.0 \times 10^{12}$  atoms/cm<sup>3</sup>.